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 * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:42:50 ON 08 JAN 2003

=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'REGISTRY' ENTERED AT 15:42:59 ON 08 JAN 2003

=> e apoliprotein cii/cn
E1            1     APOLIPROTEIN A-I BINDING PROTEIN (HUMAN GENE APOA1BP PRECURS
                    OR)/CN
E2            1     APOLIPROTEIN A-I BINDING PROTEIN (MOUSE STRAIN SWISS_WEBSTER
                     GENE APOA1BP)/CN
E3            0 --> APOLIPROTEIN CII/CN
E4            1     APOLIR/CN
E5            1     APOLIT 081/CN
E6            1     APOLIT 932/CN
E7            1     APOLIT SUP 403BMT/CN
E8            1     APOLIT UP 002BMT/CN
E9            1     APOLITE 8322/CN
E10           1     APOLITE L/CN
E11           1     APOLIZUMAB/CN
E12           1     APOLLENE ND 25D/CN

=> e apoliprotein/cn
E1            1     APOLIPOPROTEINS, A-I/CN
E2            1     APOLIPOPROTEINS, B-100 (HUMAN ARTERY WALL CELL-BINDING DOMAI
                    N)/CN
E3            0 --> APOLIPROTEIN/CN
E4            1     APOLIPROTEIN A-I BINDING PROTEIN (HUMAN GENE APOA1BP PRECURS
                    OR)/CN
E5            1     APOLIPROTEIN A-I BINDING PROTEIN (MOUSE STRAIN SWISS_WEBSTER
                     GENE APOA1BP)/CN
E6            1     APOLIR/CN
E7            1     APOLIT 081/CN
E8            1     APOLIT 932/CN
E9            1     APOLIT SUP 403BMT/CN
E10           1     APOLIT UP 002BMT/CN
E11           1     APOLITE 8322/CN
E12           1     APOLITE L/CN

=> e apoliprotein c-ii/cn
E1            1     APOLIPROTEIN A-I BINDING PROTEIN (HUMAN GENE APOA1BP PRECURS
                    OR)/CN
E2            1     APOLIPROTEIN A-I BINDING PROTEIN (MOUSE STRAIN SWISS_WEBSTER
                     GENE APOA1BP)/CN
E3            0 --> APOLIPROTEIN C-II/CN
E4            1     APOLIR/CN
E5            1     APOLIT 081/CN
E6            1     APOLIT 932/CN
E7            1     APOLIT SUP 403BMT/CN
E8            1     APOLIT UP 002BMT/CN
E9            1     APOLITE 8322/CN
E10           1     APOLITE L/CN
E11           1     APOLIZUMAB/CN
E12           1     APOLLENE ND 25D/CN

=> e apolipoprotein c-ii/cn
E1            1     APOLIPOPROTEIN C-I (HUMAN CLONE F19374 GENE APOC1 N-TERMINAL
                     FRAGMENT)/CN
E2            1     APOLIPOPROTEIN C-I (TUPAIA GLIS PRECURSOR)/CN
E3            0 --> APOLIPOPROTEIN C-II/CN
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E4            1     APOLIPOPROTEIN C-II (CHICKEN CLONE T1 C-TERMINAL FRAGMENT)/C
                    N
E5            1     APOLIPOPROTEIN C-II (ONCORHYNCHUS MYKISS PRECURSOR)/CN
E6            1     APOLIPOPROTEIN C-III (CAVIA PORCELLUS LIVER PRECURSOR)/CN
E7            1     APOLIPOPROTEIN C-III (HUMAN GENE APOC3 ISOENZYME APOC-III-AL
                    A23)/CN
E8            1     APOLIPOPROTEIN C-III (HUMAN GENE APOC3 ISOENZYME APOC-III-TH
                    R23)/CN
E9            1     APOLIPOPROTEIN C2 (CATTLE FRAGMENT)/CN
E10           1     APOLIPOPROTEIN C2 (MOUSE CLONE MAPOC2C4 PRECURSOR)/CN
E11           1     APOLIPOPROTEIN CII (GALLUS DOMESTICUS CLONE T1 C-TERMINAL FR
                    AGMENT)/CN
E12           1     APOLIPOPROTEIN CIII (MOUSE CLONE PMCIII-4.7 GENE APOC-3 PREC
                    URSOR)/CN

=> s e4
L1            1 "APOLIPOPROTEIN C-II (CHICKEN CLONE T1 C-TERMINAL FRAGMENT)"/CN

=> d

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   186778-73-4  REGISTRY
CN   Apolipoprotein C-II (chicken clone T1 C-terminal fragment) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN   Apolipoprotein CII (Gallus domesticus clone T1 C-terminal fragment)
FS   PROTEIN SEQUENCE
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
               1 REFERENCES IN FILE CA (1962 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1962 TO DATE)


=> e apolipoprotein c/cn
E1            1     APOLIPOPROTEIN B48 RECEPTOR (HUMAN PLACENTA GENE APOB48R ISO
                    FORM 2)/CN
E2            1     APOLIPOPROTEIN B48 RECEPTOR (HUMAN THP-1 MONOCYTE-MACROPHAGE
                     CELL GENE APOB48R)/CN
E3            0 --> APOLIPOPROTEIN C/CN
E4            1     APOLIPOPROTEIN C-I (HUMAN CLONE F19374 GENE APOC1 N-TERMINAL
                     FRAGMENT)/CN
E5            1     APOLIPOPROTEIN C-I (TUPAIA GLIS PRECURSOR)/CN
E6            1     APOLIPOPROTEIN C-II (CHICKEN CLONE T1 C-TERMINAL FRAGMENT)/C
                    N
E7            1     APOLIPOPROTEIN C-II (ONCORHYNCHUS MYKISS PRECURSOR)/CN
E8            1     APOLIPOPROTEIN C-III (CAVIA PORCELLUS LIVER PRECURSOR)/CN
E9            1     APOLIPOPROTEIN C-III (HUMAN GENE APOC3 ISOENZYME APOC-III-AL
                    A23)/CN
E10           1     APOLIPOPROTEIN C-III (HUMAN GENE APOC3 ISOENZYME APOC-III-TH
                    R23)/CN
E11           1     APOLIPOPROTEIN C2 (CATTLE FRAGMENT)/CN
E12           1     APOLIPOPROTEIN C2 (MOUSE CLONE MAPOC2C4 PRECURSOR)/CN

=> e
E13           1     APOLIPOPROTEIN CII (GALLUS DOMESTICUS CLONE T1 C-TERMINAL FR
                    AGMENT)/CN
E14           1     APOLIPOPROTEIN CIII (MOUSE CLONE PMCIII-4.7 GENE APOC-3 PREC
                    URSOR)/CN
E15           1     APOLIPOPROTEIN D (BELGIAN LANDRACE SWINE GENE APOD FRAGMENT)
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                  /CN
E16           1     APOLIPOPROTEIN D (GUINEA PIG CLONE GP-APO D-20)/CN
E17           1     APOLIPOPROTEIN D (MACACA FASCICULARIS CLONE QCCE-15083 GENE
                    APOD)/CN
E18           1     APOLIPOPROTEIN D (MOUSE STRAIN SWISS WEBSTER GENE APOD)/CN
E19           1     APOLIPOPROTEIN E (CATTLE GENE APOE)/CN
E20           1     APOLIPOPROTEIN E (DANIO RERIO CLONE E1 GENE APOE PRECURSOR)/
                    CN
E21           1     APOLIPOPROTEIN E (DANIO RERIO PRECURSOR)/CN
E22           1     APOLIPOPROTEIN E (HUMAN CLONE F19374 GENE APOE)/CN
E23           2     APOLIPOPROTEIN E (HUMAN CLONE PHAE(112,178,813). GENE APOE)/
                    CN
E24           1     APOLIPOPROTEIN E (HUMAN GENE APOE ISOFORM 1)/CN

=> s e12
L2            1 "APOLIPOPROTEIN C2 (MOUSE CLONE MAPOC2C4 PRECURSOR)"/CN

=> d

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   151688-85-6  REGISTRY
CN   Lipoprotein C-II, pre- (mouse clone mAPOC2c4) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Apolipoprotein C2 (mouse clone mAPOC2c4 precursor)
FS   PROTEIN SEQUENCE
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
               1 REFERENCES IN FILE CA (1962 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1962 TO DATE)


=> e apolp-glu/cn
E1            1     APOLLON/CN
E2            1     APOLON B6/CN
E3            0 --> APOLP-GLU/CN
E4            1     APOLUDIN/CN
E5            1     APOLUDIN, ANHYDRODEHYDRO-/CN
E6            1     APOMATE/CN
E7            1     APOMETHSCOPOLAMINE/CN
E8            1     APOMETHSCOPOLAMINE NITRATE/CN
E9            1     APOMETZGERIN/CN
E10           1     APOMIGREN (HUMAN)/CN
E11           1     APOMINE/CN
E12           1     APOMINE BLACK GX/CN

=> file ca
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                14.60      14.81

FILE 'CA' ENTERED AT 15:47:00 ON 08 JAN 2003

=> s bensadoun a/au and py=1974
            19 BENSADOUN A/AU
        416555 PY=1974
L3           0 BENSADOUN A/AU AND PY=1974

=> file biosis embase medline
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
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FULL ESTIMATED COST                                    3.68      18.49

FILE 'BIOSIS' ENTERED AT 15:47:42 ON 08 JAN 2003
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FILE 'MEDLINE' ENTERED AT 15:47:42 ON 08 JAN 2003

=> s bensadoun a/au and py=1974
L4            4 BENSADOUN A/AU AND PY=1974

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5            2 DUP REM L4 (2 DUPLICATES REMOVED)
                ANSWERS '1-2' FROM FILE BIOSIS

=> d 1-2

L5   ANSWER 1 OF 2  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
AN   1974:183917  BIOSIS
DN   BA58:13611
TI   PURIFICATION AND CHARACTERIZATION OF LIPO PROTEIN LIPASE EC-3.1.1.3 FROM
     PIG ADIPOSE TISSUE.
AU   BENSADOUN A; EHNHOLM C; STEINBERG D; BROWN W V
SO   J BIOL CHEM, (1974) 249 (7), 2220-2227.
     CODEN: JBCHA3. ISSN: 0021-9258.
FS   BA; OLD
LA   Unavailable

L5   ANSWER 2 OF 2  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN   1974:37502  BIOSIS
DN   BR10:37502
TI   EFFECTS OF FASTING ON TRI GLYCERIDE HYDROLASE ACTIVITY OF CHICKEN AND RAT
     PLASMA.
AU   BENSON J D; HEARN V; BENSADOUN A
SO   Fed. Proc., (1974) 33 (3 PART 1), 664.
     CODEN: FEPRA7. ISSN: 0014-9446.
DT   Conference
FS   BR; OLD
LA   Unavailable


=> file ca
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               5.60      24.09

FILE 'CA' ENTERED AT 15:48:20 ON 08 JAN 2003

=> s bensadoun a?/au and py=1974
             91 BENSADOUN A?/AU
         416555 PY=1974
L6            1 BENSADOUN A?/AU AND PY=1974

=> d

L6   ANSWER 1 OF 1  CA  COPYRIGHT 2003 ACS
AN   81:768  CA
TI   Purification and characterization of lipoprotein lipase from pig adipose
     tissue
AU   Bensadoun, Andre; Ehnholm, Christian; Steinberg, Daniel; Brown,
     W. Virgil
CS   Dep. Med., Univ. California, La Jolla, CA, USA
```

SO Journal of Biological Chemistry (**1974**), 249(7), 2220-7
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English

=> d all

L6 ANSWER 1 OF 1 CA COPYRIGHT 2003 ACS
AN 81:768 CA
TI Purification and characterization of lipoprotein lipase from pig adipose tissue
AU **Bensadoun, Andre**; Ehnholm, Christian; Steinberg, Daniel; Brown, W. Virgil
CS Dep. Med., Univ. California, La Jolla, CA, USA
SO Journal of Biological Chemistry (**1974**), 249(7), 2220-7
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
CC 7-2 (Enzymes)
AB Lipoprotein lipase was purified from Me2CO powders of pig adipose tissue. Extn. of Me2CO powders with 1.2M m NaCl in 0.005M Na barbital buffer, pH 7.4, or heparin (200 units/ml) in distilled H2O, was 6 times as effective as extn. with 0.025M NH4OH-NH4Cl buffer, pH 8.6, the commonly used extractant for lipoprotein lipase. At pH <7.5, over 85% of the activity extd. into 1.2M NaCl could be recovered after 4 hr. The partially purified enzyme at later stages was stabilized by the inclusion of 20% glycerol in the buffers. Most of the purifn. was accomplished by affinity chromatog. on Sepharose 4B columns contg. covalently bound heparin. At this step, the prepn. was purified 600-fold. This purified enzyme was bound reversibly to columns contg. concanavalin A covalently bound to Sepharose. Lipolytic activity was eluted from the concanavalin A-Sepharose column with 0.2M .alpha.-methyl-D-mannoside, M NaCl and 0.005MNa barbital, pH 7.0. At this stage, the enzyme was purified 2100-fold. Isoelec. focusing yielded a single major peak of activity with an isoelec. point of 4.0. Min. mol. wt. detn. by gel filtration in buffers contg. M NaCl and by disc gel electrophoresis in Na dodecyl sulfate yielded values of 62,000 and 60,000, resp. The crude enzyme, and that eluted from heparin-Sepharose columns, did not show stimulation by heparin, whereas that obtained after isoelec focusing exhibited a 60-100% stimulation at 22 .mu.g heparin/ml. Activation by dialyzed serum was dependent on the stage of purifn. The crude enzyme showed a 20-fold stimulation by serum but showed some activity in its absence; that purified by isoelec. focusing exhibited a complete dependence on the presence of serum for hydrolysis of triolein emulsions stabilized with gum arabic. Of the 3 very-low-density lipoprotein apoproteins studied, only apoLp-glutamic acid (apolipoprotein contg. C terminal glutamic acid) could substitute for serum as an activator. In the presence of serum in the assay system, apoLp-serine was as potent an inhibitor of lipoprotein lipase as apoLp-alanine.
ST lipoprotein lipase adipose tissue; affinity chromatog lipoprotein lipase
IT Adipose tissue, composition
(lipoprotein lipase of)
IT 9004-02-8
RL: BIOL (Biological study)
(of adipose tissue, of pig)

=> FIL REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 7.23 | 31.32 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
|---|---|---|

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                                                        ENTRY    SESSION
CA SUBSCRIBER PRICE                                     -0.62      -0.62

FILE 'REGISTRY' ENTERED AT 15:48:56 ON 08 JAN 2003

=> S 9004-02-8/RN

L7            1 9004-02-8/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L7 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.63 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L7   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   9004-02-8  REGISTRY
CN   Lipase, lipoprotein (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Clearing factor
CN   Clearing factor lipase
CN   E.C. 3.1.1.34
CN   Lipemia-clearing factor
CN   Lipoprotein lipase
CN   LPL Amano 3
CN   Postheparin lipase
CN   Postheparin plasma lipoprotein lipase
DR   9007-29-8, 9013-98-3
MF   Unspecified
CI   MAN
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
       CA, CABA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
       CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NIOSHTIC, PROMT,
       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            5611 REFERENCES IN FILE CA (1962 TO DATE)
              30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            5628 REFERENCES IN FILE CAPLUS (1962 TO DATE)


=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> file biosis embase medline
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     2.48      33.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -0.62
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FILE 'BIOSIS' ENTERED AT 15:49:55 ON 08 JAN 2003
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FILE 'EMBASE' ENTERED AT 15:49:55 ON 08 JAN 2003
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FILE 'MEDLINE' ENTERED AT 15:49:55 ON 08 JAN 2003

=> file ca
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.38      36.18

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)            SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -0.62

FILE 'CA' ENTERED AT 15:50:03 ON 08 JAN 2003

=> s apolipoprotein c-ii
         17406 APOLIPOPROTEIN
         11727 APOLIPOPROTEINS
         20369 APOLIPOPROTEIN
                 (APOLIPOPROTEIN OR APOLIPOPROTEINS)
       2916344 C
       1875132 II
           640 IIS
       1875489 II
                 (II OR IIS)
L8         514 APOLIPOPROTEIN C-II
                 (APOLIPOPROTEIN(W)C(W)II)

=> s apolipoprotein c-ii/ti
          7833 APOLIPOPROTEIN/TI
          1312 APOLIPOPROTEINS/TI
          9069 APOLIPOPROTEIN/TI
                 ((APOLIPOPROTEIN OR APOLIPOPROTEINS)/TI)
        196808 C/TI
        435992 II/TI
            76 IIS/TI
        436063 II/TI
                 ((II OR IIS)/TI)
L9         154 APOLIPOPROTEIN C-II/TI
                 ((APOLIPOPROTEIN(W)C(W)II)/TI)

=> d ind 1

L9   ANSWER 1 OF 154  CA  COPYRIGHT 2003 ACS
CC   6-3 (General Biochemistry)
ST   apolipoprotein CII amyloid formation suppression clusterin
IT   Apolipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (C-II; suppression of apolipoprotein c-II amyloid formation by the
        extracellular chaperone, clusterin)
IT   Human
     Protein folding
        (suppression of apolipoprotein c-II amyloid formation by the
        extracellular chaperone, clusterin)
IT   Amyloid
     Clusterin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (suppression of apolipoprotein c-II amyloid formation by the
        extracellular chaperone, clusterin)
```

=> d ind 2-5

L9 ANSWER 2 OF 154 CA COPYRIGHT 2003 ACS
CC 14-10 (Mammalian Pathological Biochemistry)
ST macromol crowding amyloid formation apolipoprotein CII Alzheimer disease
IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(C-II; macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT Brain, disease
Prion diseases
(Creutzfeldt-Jakob; macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT Amyloid
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(aggregation; macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(amyloidogenic; macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT Alzheimer's disease
Parkinson's disease
Self-association
(macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT Secondary structure
(protein; macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)
IT 2390-54-7, Thioflavin T 9004-54-0, Dextran T10, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(macromol. crowding accelerates amyloid formation by human apolipoprotein C-II)

L9 ANSWER 3 OF 154 CA COPYRIGHT 2003 ACS
CC 13-2 (Mammalian Biochemistry)
Section cross-reference(s): 1, 2
ST farnesoid X receptor apolipoprotein transcription blood triglyceride bile acid
IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(C-II; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)
IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HCR-1 and HCR-2 (hepatic control region-1 and -2); farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)
IT Retinoid X receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(RXR.alpha.; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)
IT Glycerides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)
IT Human
Hypolipemic agents
Liver
Transcription, genetic
(farnesoid X-activated receptor induces apolipoprotein C-II

transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Bile acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(farnesoid X-activated receptor response elements (FXREs) in HCR-1 and HCR-2; farnesoid X-activated receptor induces apolipoprotein C-II transcription in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(farnesoid X-activated; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(hyperlipidemia; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metab., lipoprotein; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(phospholipid-exchanging; farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT 57-88-5, Cholesterol, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

IT 53-41-8, Androsterone 81-25-4, Cholic acid 83-44-3, Deoxycholic acid 434-13-9, Lithocholic acid 474-25-9, Chenodeoxycholic acid 71441-28-6, TTNPB 153559-57-0, LG100153 278779-30-9, GW 4064
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(farnesoid X-activated receptor induces apolipoprotein C-II transcription in HepG2 cells in relation to mol. mechanism linking plasma triglyceride levels to bile acids)

L9 ANSWER 4 OF 154 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
Section cross-reference(s): 14
ST apolipoprotein CII amyloid alpha crystallin chaperone
IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(C-II; inhibition of amyloid formation by apolipoprotein C-II by .alpha.-crystallin)

IT Chaperonins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of amyloid formation by apolipoprotein C-II by mol. chaperone, .alpha.-crystallin)

IT Molecular association
(inhibition of amyloid formation by apolipoprotein C-II by .alpha.-crystallin)

IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of amyloid formation by apolipoprotein C-II by .alpha.-crystallin)
IT Conformation
(protein; inhibition of amyloid formation by apolipoprotein C-II by .alpha.-crystallin)
IT Crystallins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha.-; inhibition of amyloid formation by apolipoprotein C-II by .alpha.-crystallin)

L9 ANSWER 5 OF 154 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
ST phospholipid apolipoprotein C II amyloid fibril
IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); BIOL (Biological study); PROC (Process)
(C-II; sub-micellar phospholipid accelerates amyloid formation by apolipoprotein C-II)
IT Secondary structure
(protein; sub-micellar phospholipid accelerates amyloid formation by apolipoprotein C-II)
IT Aggregation
Micelles
Self-association
.alpha.-Helix
(sub-micellar phospholipid accelerates amyloid formation by apolipoprotein C-II)
IT Amyloid
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); PRP (Properties); BIOL (Biological study); FORM (Formation, nonpreparative)
(sub-micellar phospholipid accelerates amyloid formation by apolipoprotein C-II)
IT 53892-41-4, Dihexanoylphosphatidylcholine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(sub-micellar phospholipid accelerates amyloid formation by apolipoprotein C-II)

=> d ind 6-10

L9 ANSWER 6 OF 154 CA COPYRIGHT 2003 ACS
CC 13-5 (Mammalian Biochemistry)
Section cross-reference(s): 14
ST apolipoprotein CII gene expression myelomonocyte differentiation
IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(C-II; apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells)
IT Animal cell line
(HL-60; apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells)
IT Animal cell line
(THP-1; apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells)
IT Animal cell line
(U937; apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells)
IT Cell differentiation
Macrophage

Monocyte
(apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells)

IT Atherosclerosis
(apolipoprotein C-II gene expression during myelomonocytic differentiation of human leukemic cells in relation to)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(apolipoprotein C-II; gene expression during myelomonocytic differentiation of human leukemic cells)

L9 ANSWER 7 OF 154 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
ST apolipoprotein CII structure SDS micelle

IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(C-II; NMR structure of apolipoprotein C-II in presence of SDS provides insight into lipid interactions of apoC-II and mechanism of lipoprotein lipase activation)

IT .alpha.-Helix
(NMR structure of apolipoprotein C-II in presence of SDS reveals extensive region of .alpha.-helix in N-terminal half of apoC-II)

IT Conformation
(protein; NMR structure of apolipoprotein C-II in presence of SDS provides insight into lipid interactions of apoC-II and mechanism of lipoprotein lipase activation)

IT 9004-02-8, Lipoprotein lipase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NMR structure of apolipoprotein C-II in presence of SDS provides insight into lipid interactions of apoC-II and mechanism of lipoprotein lipase activation)

IT 151-21-3, Sodium dodecyl sulfate, miscellaneous
RL: MSC (Miscellaneous)
(NMR structure of apolipoprotein C-II in presence of SDS provides insight into lipid interactions of apoC-II and mechanism of lipoprotein lipase activation)

L9 ANSWER 8 OF 154 CA COPYRIGHT 2003 ACS
CC 14-10 (Mammalian Pathological Biochemistry)
ST chromosome 19 locus apolipoprotein C11 multiple sclerosis polemic

IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(C-II; chromosome 19 locus apolipoprotein C-II assocn. with multiple sclerosis in humans)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(apoc2; chromosome 19 locus apolipoprotein C-II assocn. with multiple sclerosis in humans)

IT Multiple sclerosis
(chromosome 19 locus apolipoprotein C-II assocn. with multiple sclerosis in humans)

IT Chromosome
(human 19; chromosome 19 locus apolipoprotein C-II assocn. with multiple sclerosis in humans)

L9 ANSWER 9 OF 154 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
ST apolipoprotein C II conformation lipase activation sodium dodecylsulfate dodecylphosphocholine

IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(C-II; structure of a biol. active fragment of human serum

apolipoprotein C-II in the presence of sodium dodecyl sulfate and dodecylphosphocholine)
IT Conformation
(protein; structure of a biol. active fragment of human serum apolipoprotein C-II in the presence of sodium dodecyl sulfate and dodecylphosphocholine)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(very-low-d.; structure of a biol. active fragment of human serum apolipoprotein C-II in the presence of sodium dodecyl sulfate and dodecylphosphocholine)
IT 151-21-3, Sodium dodecyl sulfate, biological studies 29557-51-5, Dodecylphosphocholine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(structure of a biol. active fragment of human serum apolipoprotein C-II in the presence of sodium dodecyl sulfate and dodecylphosphocholine)
IT 9001-62-1, Lipase
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(structure of a biol. active fragment of human serum apolipoprotein C-II in the presence of sodium dodecyl sulfate and dodecylphosphocholine)

L9 ANSWER 10 OF 154 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
ST apolipoprotein C II amyloid conformation
IT Apolipoproteins
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(C-II; human apolipoprotein C-II aggregation and formation of twisted amyloid ribbons and closed loops)
IT Fibril
Self-association
(human apolipoprotein C-II aggregation and formation of twisted amyloid ribbons and closed loops)
IT Amyloid
RL: PRP (Properties)
(human apolipoprotein C-II aggregation and formation of twisted amyloid ribbons and closed loops)
IT Conformation
(loop, protein, protein; human apolipoprotein C-II aggregation and formation of twisted amyloid ribbons and closed loops)
IT Conformation
(protein; human apolipoprotein C-II aggregation and formation of twisted amyloid ribbons and closed loops)

```
=> s apolp-glu
           159 APOLP
             5 APOLPS
           160 APOLP
                 (APOLP OR APOLPS)
         23076 GLU
            17 GLUS
         23091 GLU
                 (GLU OR GLUS)
L10          7 APOLP-GLU
                 (APOLP(W)GLU)

=> d 1-7 ind

L10 ANSWER 1 OF 7 CA COPYRIGHT 2003 ACS
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CC 7-2 (Enzymes)
ST lipoprotein lipase liver adipose
IT Liver, composition
(lipoprotein lipase of, properties of adipose tissue-like)
IT Adipose tissue, composition
(lipoprotein lipase of, properties of liver enzyme resembling)
IT 9004-02-8
RL: BIOL (Biological study)
(adipose tissue-like, in liver)

L10 ANSWER 2 OF 7 CA COPYRIGHT 2003 ACS
CC 6-3 (General Biochemistry)
ST blood serum lipoprotein peptide
IT Lipoproteins
RL: BIOL (Biological study)
(blood-serum low- and very-low-d., peptide compn. of)

L10 ANSWER 3 OF 7 CA COPYRIGHT 2003 ACS
CC 13-2 (Mammalian Biochemistry)
ST plasma lipoprotein metab; heparin blood lipoprotein metab; protein lipid metab blood
IT Lipoproteins
RL: BIOL (Biological study)
(blood-plasma, metab. of very-low-d.)
IT 9005-49-6
RL: BIOL (Biological study)
(very-low-d. lipoproteins metab. in in response to)

L10 ANSWER 4 OF 7 CA COPYRIGHT 2003 ACS
CC 13-2 (Mammalian Biochemistry)
ST lipoprotein apoprotein transfer plasma; very low density lipoprotein
IT Lipoproteins
RL: PRP (Properties)
(blood-plasma very-low-density apo-transfer of, between plasma lipoproteins)

L10 ANSWER 5 OF 7 CA COPYRIGHT 2003 ACS
CC 7 (Enzymes)
ST lipoprotein lipase inhibition
IT Lipoproteins
RL: BIOL (Biological study)
(apoprotein of very low d., lipoprotein lipase inhibition by)
IT 9004-02-8
RL: PROC (Process)
(inhibition of, by apoprotein of very low d. lipoprotein)

L10 ANSWER 6 OF 7 CA COPYRIGHT 2003 ACS
CC 6 (General Biochemistry)
ST plasma apolipoprotein structure; carboxyl terminal peptide apolipoprotein
IT Lipoproteins
RL: BIOL (Biological study)
(blood-plasma, C-terminal amino acids of very low-d. apo-)

L10 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS
CC 3 (Enzymes)
ST plasma clearing factors; lipoprotein lipases apoproteins; apoproteins lipoprotein lipases; lipases lipoprotein apoproteins
IT Lipoproteins
RL: BIOL (Biological study)
(glutamic acid C-terminal apoprotein of high-d., lipoprotein lipase activation by)
IT 9004-02-8, Lipoprotein lipase
(apoprotein activator for)

=> FIL REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 20.85 | 57.03 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | 0.00 | -0.62 |

FILE 'REGISTRY' ENTERED AT 15:54:11 ON 08 JAN 2003

=> S 9005-49-6/RN

L11 1 9005-49-6/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L11 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.63 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **9005-49-6** REGISTRY
CN Heparin (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN .alpha.-Heparin
CN Bemiparin
CN Certoparin
CN Clexane
CN Clivarin
CN Clivarine
CN CY 216
CN CY 222
CN Dalteparin
CN Enoxaparin
CN Fluxum
CN FR 860
CN Fragmin A
CN Fragmin B
CN Fraxiparin
CN Heparin subcutan
CN Heparin sulfate
CN Heparinic acid
CN KB 101
CN Multiparin
CN Novoheparin
CN OP 386
CN OP 622
CN Pabyrn
CN Parnaparin
CN Parvoparin
CN Reviparin
CN Sandoparin
CN Sublingula
CN Tinzaparin
CN Vetren
CN Vitrum AB
DR 9075-96-1, 11078-24-3, 11129-39-8, 104521-37-1, 37324-73-5, 91449-79-5
MF Unspecified

```
CI    PMS, COM, MAN
PCT   Manual registration, Polyester, Polyester formed
LC    STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
        CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
        CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES,
        EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
        NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, TOXCENTER,
        USAN, USPAT2, USPATFULL
          (*File contains numerically searchable property data)
      Other Sources:   DSL**, EINECS**, WHO
          (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
            19667 REFERENCES IN FILE CA (1962 TO DATE)
             1866 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            19693 REFERENCES IN FILE CAPLUS (1962 TO DATE)


=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.08      59.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -0.62

FILE 'REGISTRY' ENTERED AT 15:55:04 ON 08 JAN 2003

=> S 9004-02-8/RN

L12           1 9004-02-8/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L12 RN CCN 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 1.68 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L12  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   9004-02-8  REGISTRY
CN   Lipase, lipoprotein (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Clearing factor;  Clearing factor lipase;  E.C. 3.1.1.34;
     Lipemia-clearing factor;  Lipoprotein lipase;  LPL Amano 3;  Postheparin
     lipase;  Postheparin plasma lipoprotein lipase


=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED
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=>

=> file ca

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 2.48 | 61.59 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | 0.00 | -0.62 |

FILE 'CA' ENTERED AT 15:56:00 ON 08 JAN 2003

=> d l10 bib hit

L10 ANSWER 1 OF 7 CA COPYRIGHT 2003 ACS
AN 88:18027 CA
TI Identification of an adipose tissue-like lipoprotein lipase in perfusates of chicken liver
AU Bensadoun, Andre; Koh, Tung Liu
CS Div. Nutr. Sci., Cornell Univ., Ithaca, NY, USA
SO Journal of Lipid Research (1972), 18(6), 768-73
CODEN: JLPRAW; ISSN: 0022-2275
DT Journal
LA English
AB The nature of the lipolytic activity released from chicken livers perfused with Krebs-Ringer buffer contg. heparin fraction V albumin and glycerol was investigated. The nonrecirculating perfusates contained the previously described NaCl-resistant liver lipase as well as an apolipoprotein (**apoLp-Glu**)-activated lipoprotein lipase (LPL). Crude perfusate lipolytic activity was sepd. on heparin-Sepharose columns into 2 enzymic peaks which were eluted at different NaCl molarities. The liver LPL activity was stimulated by human **apoLp-Glu** and inhibited by apoLp-Ala, apoLp-Ser, apoLp-GlnI, and apoLP-GlnII. Liver LPL was fully inhibited by anti-adipose LPL Igs. The liver lipase was not affected by **apoLP -Glu** or anti-adipose LPL Igs. The data demonstrate the presence in liver perfusates of a LPL with properties similar to those of adipose tissue lipoprotein lipase.

=> d l10 bib hit 2-7

L10 ANSWER 2 OF 7 CA COPYRIGHT 2003 ACS
AN 82:150878 CA
TI Comparison of the peptide composition of human serum low and very low density lipoprotein
AU Rubenstein, Bernard; Steiner, George
CS Dep. Med., Univ. Toronto, Toronto, ON, Can.
SO Canadian Journal of Biochemistry (1975), 53(2), 128-34
CODEN: CJBIAE; ISSN: 0008-4018
DT Journal
LA English
AB The apoprotein structure was examd. of human very-low-d. lipoprotein (VLDL) and 2 subfractions of human low-d. lipoproteins, LDL-2 (d. 1.026-1.046) and LDL-3 (d. 1.046-1.063). Both LDL-2 and LDL-3 had similar peptide patterns on polyacrylamide gel electrophoresis and this was the same as VLDL. Column chromatog. showed that the B component of the apoproteins of VLDL contained 42-5% of the total protein while the non-B component contained 55-8%. In both LDL-2 and LDL-3, the B component was 95% of the total protein whereas the non-B was 5%. An examn. of the peptides of the non-B portion of VLDL and LDL was carried out by DEAE-cellulose chromatog. Although both VLDL and LDL contained the same major peptides, the proportion of the total non-B of each of these

peptides in VLDL differed from that seen in LDL. **ApoLP-Glu** and apoLP-Ala of VLDL contained 13 and 65%, resp., of the total non-B protein, whereas in LDL these peptides were 26 and 46%. Thus, apoLDL contains the non-B proteins of VLDL, but in different proportions and in a much reduced percentage.

L10 ANSWER 3 OF 7 CA COPYRIGHT 2003 ACS
AN 80:68682 CA
TI Metabolic conversion of human plasma very low density lipoprotein to low density lipoprotein
AU Eisenberg, Shlomo; Bilheimer, David W.; Levy, Robert L.; Lindgren, Frank T.
CS Mol. Dis. Branch, Natl. Heart Lung Inst., Bethesda, MD, USA
SO Biochimica et Biophysica Acta (1973), 326(3), 361-77
CODEN: BBACAQ; ISSN: 0006-3002
DT Journal
LA English
AB The relation of 125I-labeled apoproteins of very-low-d. lipoprotein to that of other lipoproteins was studied in humans during steady-state conditions and following heparin injection. Heterogeneous metab. of very-low-d. lipoprotein apoproteins in normal individuals was apparent during steady-state conditions. Radioactivity was transferred to high-d. lipoprotein immediately in vivo. With time, radioactivity was also transferred to an intermediate-d. lipoprotein (d. = 1.006-1.019) and thereafter to low-d. lipoprotein (d. = 1.019-1.063). Labeled **apoLP-glu** and apoLP-ala (low-mol.-wt. apolipoproteins with CO2H-terminal glutamic acid and alanine, resp.), but not labeled apoprotein of low-d. lipoprotein (apoLDL), disappeared initially from very-low-d. lipoprotein (10 min after the injection). At later time intervals, the rate of disappearance of labeled apoLDL from very-low-d. lipoprotein (t1/2 = 2-4 hr), far exceeded that of labeled **apoLP-glu** and apoLP-ala (t1/2 = 17-18 hr). Heparin affected primarily the distribution of apoprotein radioactivity between very-low-d. lipoprotein and high-d. lipoprotein and among very-low-d. lipoprotein subfractions. Forty-five min after heparin injection, a net transfer of >50% of labeled **apoLP-glu** and apoLP-ala from very-low-d. lipoprotein to high-d. lipoprotein occurred. Almost no change in content of labeled apoLDL in very-low-d. lipoprotein occurred during this interval. During the conversion of very-low-d. lipoprotein mols. of Sf 100-400 (mol. wt. 20 .times. 106-130 .times. 106) to low-d. lipoprotein (mol. wt. 2.2 .times. 106), all the apoLDL moiety of very-low-d. lipoprotein is preserved. In contrast, >95% of apoLP-ser, **apoLP-glu** and apoLP-ala, >99% of triglyceride, and >85% of the very-low-d. lipoprotein cholesterol and phospholipids are removed. Apparently, concomitantly with continuous triglyceride hydrolysis, **apoLP-glu** and apoLP-ala leave the very-low-d. lipoprotein d. range, resulting in mols. relatively poor in triglyceride and relatively rich in apoLDL. These mols. occupy a flotation rate range of Sf 12-60 and are transformed ultimately to low-d. lipoprotein, presumably by a different mechanism.

L10 ANSWER 4 OF 7 CA COPYRIGHT 2003 ACS
AN 77:124295 CA
TI Metabolism of very low density lipoprotein proteins. II. Transfer of apoproteins between plasma lipoproteins
AU Eisenberg, Shlomo; Bilheimer, David W.; Levy, Robert I.
CS Natl. Heart Lung Inst., Natl. Inst. Health, Bethesda, MD, USA
SO Biochimica et Biophysica Acta (1972), 280(1), 94-104
CODEN: BBACAQ; ISSN: 0006-3002
DT Journal
LA English
AB Apolipoprotein-glutamic acid (**apoLP-Glu**) and apolipoprotein-alanine (apoLP-Ala), complexes, small mol. wt. apolipoproteins, readily transfer in vitro from very low d. lipoprotein to other lipoproteins. Their transfer to high d. lipoprotein always exceeds

that to low d. lipoproteins, and is proportional to the concn. of lipoproteins present in the incubation mixt. A similar transfer of radioactivity occurs in vivo, and is proportional to both plasma triglyceride and high d. lipoprotein cholesterol levels. The transfer of **apoLP-Glu** and apoLP-Ala between very low d. and high d. lipoproteins is bidirectional, and thus represents, at least in part, an exchange phenomenon. In contrast, the apoprotein moiety of low d. lipoprotein does not participate in this type of transfer. Apolipoproteins can be sepd. into groups following their reassocn. properties with lipids and lipoproteins. **ApoLP-Glu** and apoLP-Ala reassoc. with all plasma lipoproteins, predominantly very low d. and high d. lipropotein. Apolipoprotein-glutamine (apoLP-Gln1) and apolipoprotein-glutamine2 (apoLP-Gln2) reassoc. primarily with their parent lipoprotein, high d. lipoprotein. Representative proteins of both groups however, reassoc. with lipid (lecithin or triglyceride). The recombination of apoproteins with lipoproteins thus may be specific and involve a process of "recognition" of the lipoprotein by the apoprotein. This specificity may not be involved in the simple recombination of apolipoproteins and lipids. These observations may explain the distribution of apoproteins among plasma lipoproteins and and provide insight into their metabolic fate.

L10 ANSWER 5 OF 7 CA COPYRIGHT 2003 ACS
AN 76:96246 CA
TI Inhibition of lipoprotein lipase by an apoprotein of human very low density lipoprotein
AU Brown, W. Virgil; Baginsky, M. L.
CS Sch. Med., Univ. California, La Jolla, CA, USA
SO Biochemical and Biophysical Research Communications (1972), 46(2), 375-82
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB The effects of 2 apolipoproteins isolated from human very low d. lipoproteins (**apoLp-Glu** and apoLp-Ala) on lipoprotein lipase (LPL) activity were studied. **ApoLp-Glu** stimulated LPL. ApoLp-Ala isolated by techniques previously described also activated LPL at low levels. However, with further purification by hydroxylaparite chromatog. all activation by apoLp-Ala was eliminated with the removal of a small contaminant immunochem. identical to **apoLp -Glu**. ApoLp-Ala consistently inhibits LPL when present at levels above 2% of the substrate. This inhibition was not overcome by addn. of phospholipid, **apoLp-Glu**, or more enzyme.

L10 ANSWER 6 OF 7 CA COPYRIGHT 2003 ACS
AN 76:31426 CA
TI Correction of COOH-terminal amino acids of human plasma very low density apolipoproteins
AU Herbert, Peter; Levy, Robert I.; Frederickson, Donald S.
CS Natl. Heart Lung Inst., Natl. Inst. Health, Bethesda, MD, USA
SO Journal of Biological Chemistry (1971), 246(22), 7068-9
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB The COOH-terminal amino acids of the low mol. wt. apoproteins of human plasma very low d. lipoprotein were investigated. Previously these were designated by their apparent COOH-terminal amino acids as alanine apolipoprotein (apoLP-Ala), valine apolipoprotein (apoLP-Val), and glutamic acid apolipoprotein (**apoLP-Glu**). Alanine has been confirmed as the COOH terminus of apoLP-Ala. Serine rather than valine is the COOH-terminal amino acid of the polypeptide previously termed apoLP-Val. Hydrazinolysis releases both glutamic acid and valine in a molar ratio of 3:1 from the DEAE-cellulose fraction previously designated **apoLP-Glu**.

L10 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS

AN 74:496 CA
TI Specific apoprotein activator for lipoprotein lipase
AU LaRosa, J. C.; Levy, Robert I.; Herbert, P.; Lux, S. E.; Fredrickson, Donald S.
CS Natl. Heart Lung Inst., Natl. Inst. Health, Bethesda, MD, USA
SO Biochemical and Biophysical Research Communications (1970), 41(1), 57-62
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB Of 5 delipidated apoproteins isolated from high-density lipoproteins and identified by their carboxyterminal residues, only apolipoprotein-glutamic acid (**apoLP-glu**) activated rat adipose tissue lipoprotein lipase in vitro in the absence of phospholipids. In the presence of phospholipids, apolipoprotein-alanine (apoLP-ala) and **apoLP-glu** stimulated enzyme activity 2-fold and 12-fold, resp. Thus, **apoLP-glu** and perhaps apoLP-ala may be the obligatory cofactors for the hydrolytic step in clearing triglycerides from the plasma.

=> log y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 17.70 | 79.29 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | -4.34 | -4.96 |

STN INTERNATIONAL LOGOFF AT 15:58:13 ON 08 JAN 2003